

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-10 (canceled)

1 Claim 11 (currently amended): For use in a router having,
2 at a given time, a currently designated routing facility
3 and a current standby routing facility, a method
4 comprising:
5 a) informing an external node that the router has
6 redundant routing facilities;
7 b) informing an external node of the ~~[[identify]]~~
8 identity of the currently designated routing facility;
9 c) providing, with the currently designated routing
10 facility when it is in a state of being the designated
11 routing facility, network information to the external
12 node; and
13 d) providing, with the current standby routing
14 facility when it is in a state of being the standby
15 routing facility, network information to the external
16 node.

1 Claim 12 (previously presented): The method of claim 11
2 wherein the currently designated routing facility and
3 current standby routing facility share a common forwarding
4 facility.

1 Claim 13 (currently amended): The method of claim 11
2 wherein the act of informing an external node that the
3 router has redundant routing facilities includes generating
4 and transmitting a message including an identification of
5 the router, an address ~~[[information]]~~ of the currently

6 designated routing facility, and an address ~~[[information]]~~
7 of the current standby routing facility.

1 Claim 14 (original): The method of claim 11 wherein the
2 act of informing an external node that the router has
3 redundant routing facilities uses an existing BGP message
4 format.

1 Claim 15 (currently amended): The method of claim 11
2 further comprising:

- 3 e) if a failure of the currently designated routing
4 facility is determined, then
5 i) electing the current standby routing facility
6 as a new designated routing facility, and
7 ii) informing the external node of the
8 ~~[[identify]]~~ identity of the newly elected new
9 designated routing facility.

1 Claim 16 (currently amended): A router comprising:

- 2 a) a currently designated routing facility;
3 b) a current standby routing facility; and
4 c) a signaling facility adapted for
5 i) informing an external node that the router
6 has redundant routing facilities, and
7 ii) informing the external node of the
8 ~~[[identify]]~~ identity of the currently designated
9 routing facility,
10 wherein the currently designated routing facility is
11 adapted to provide, when it is in a state of being the
12 designated routing facility, network information to the
13 external node, and

14 wherein the current standby routing facility is
15 adapted to provide, when it is in a state of being the
16 standby routing facility, network information to the
17 external node.

1 Claim 17 (previously presented): The router of claim 16
2 wherein the currently designated routing facility has a
3 first internet address and the current standby routing
4 facility has a second internet address.

1 Claim 18 (currently amended): A network having at least
2 two routers, each of the at least two routers comprising:
3 a) a currently designated routing facility;
4 b) a current standby routing facility; and
5 c) a signaling facility adapted for
6 i) informing an external node that the router
7 has redundant routing facilities, and
8 ii) informing the external node of the
9 ~~[[identify]]~~ identity of the currently designated
10 routing facility,

11 wherein the currently designated routing facility is
12 adapted to provide, when it is in a state of being the
13 designated routing facility, network information to the
14 external node, and

15 wherein the current standby routing facility is
16 adapted to provide, when it is in a state of being the
17 standby routing facility, network information to the
18 external node.

1 Claim 19 (original): A machine-readable medium having
2 machine readable instructions stored thereon which, when
3 executed by a machine, effect the method of claim 11.

1 Claim 20 (currently amended): For use in a router adapted
2 to interact with an external router having, at a given
3 time, a currently designated routing facility and a current
4 standby routing facility, a method comprising:

- 5 a) accepting, from the external router, the
6 ~~[[identify]]~~ identity of the currently designated
7 routing facility;
- 8 b) accepting, from the currently designated routing
9 facility of the external router when it is in a state
10 of being the designated routing facility, network
11 information;
- 12 c) using the network information accepted from the
13 currently designated routing facility of the external
14 router for determining routes; and
- 15 d) accepting, from the current standby routing
16 facility of the external router when it is in a state
17 of being the standby routing facility, network
18 information, but not using it for determining routes.

1

1 Claim 21 (previously presented): The method of claim 20
2 further comprising:

- 3 e) storing the network information accepted from the
4 current standby routing facility of the external
5 router.

1 Claim 22 (previously presented): The method of claim 20
2 further comprising:

- 3 e) accepting, from the external router, an indication
4 that the currently designated routing facility has
5 failed;

6 f) accepting, from the external router, an indication
7 that the formerly current standby routing facility has
8 been elected as a new designated routing facility; and
9 g) using path information from the newly elected new
10 designated routing facility.

1 Claim 23 (currently amended): The method of claim 21
2 further comprising:
3 f) accepting, from the external router, an indication
4 that the currently designated routing facility has
5 failed;
6 g) accepting, from the external router, an indication
7 that the formerly current standby routing facility has
8 been elected as a new designated routing facility; and
9 h) using the ~~[[stored-path]]~~ network information from
10 the formerly current standby routing facility that is
11 now the newly elected new designated routing facility.

1 Claim 24 (currently amended): A router adapted to interact
2 with an external router having, at a given time a currently
3 designated routing facility and a current standby routing
4 facility, the router comprising:
5 a) an input for
6 i) accepting, from the external router, the
7 ~~[[identify]]~~ identity of the currently designated
8 routing facility, and
9 ii) accepting, from the currently designated
10 routing facility of the external router when it
11 is in a state of being the designated routing
12 facility, network information; and
13 b) a routing facility for

14 i) using the network information accepted from
15 the currently designated routing facility of the
16 external router for determining routes, and
17 ii) accepting, from the current standby routing
18 facility of the external router when it is in a
19 state of being the standby routing facility,
20 network information, but not using it for
21 determining routes.

1 Claim 25 (previously presented): The router of claim 24
2 further comprising:

3 c) a storage device for storing the network
4 information accepted from the current standby routing
5 facility of the external router.

1 Claim 26 (previously presented): The router of claim 24
2 wherein the input is further adapted for

3 iii) accepting, from the external router, an
4 indication that the currently designated routing
5 facility has failed, and

6 iv) accepting, from the external router, an
7 indication that the formerly current standby
8 routing facility has been elected as a new
9 designated routing facility, and

10 wherein the routing facility is further adapted to use
11 path information from the newly elected new designated
12 routing facility when the input accepts the indication that
13 the formerly current standby routing facility has been
14 elected as the new designated routing facility.

1 Claim 27 (currently amended): The method of claim 25
2 wherein the input is further adapted for

3 iii) accepting, from the external router, an
4 indication that the currently designated routing
5 facility has failed, and
6 iv) accepting, from the external router, an
7 indication that the formerly current standby
8 routing facility has been elected as ~~the~~ a new
9 designated routing facility, and
10 wherein the routing facility is further adapted to use
11 the ~~[[stored-path]]~~ network information that was accepted
12 from the formerly current standby routing facility and that
13 was stored, if it is newly elected as the new designated
14 routing facility.

1 Claim 28 (original): A machine-readable medium having
2 machine readable instructions stored thereon which, when
3 executed by a machine, effect the method of claim 20.

Claim 29 (canceled)

1 Claim 30 (currently amended): The router of claim 16
2 further comprising:
3 d) means for electing the current standby routing
4 facility as a new designated routing facility if a
5 failure of the currently designated routing facility
6 is determined; and
7 e) means for informing the external node of the
8 ~~[[identify]]~~ identity of the newly elected new
9 designated routing facility.

Claim 31 (new): The method of claim 11 wherein the
external node is a second router which is external to the

router having, at a given time, a currently designated routing facility and a current standby routing facility.

Claim 32 (new): The method of claim 31 wherein the router and the second router belong to different autonomous systems.

Claim 33 (new): The router of claim 16 wherein the external node is a second router which is external to the router.

Claim 34 (new): The router of claim 33 wherein the router and the second router belong to different autonomous systems.

Claim 35 (new): The method of claim 20 wherein the router and the external router belong to different autonomous systems.

Claim 36 (new): The router of claim 24 wherein the router and the external router belong to different autonomous systems.